American Fern Iournal

VOL. 42

APRIL-JUNE, 1952

No. 2

The American Species of Xiphopteris

E. B. COPELAND

The first publication of this genus is said to have been by Kaulfuss, in Jahrbuch für Pharmacie, 1820, p. 35, which I have not seen. Kaulfuss republished it in his "Enumeratio" of the ferns collected by Chamisso, 1824, page 85, where two species are named, X. serrulata (Swartz) and X. myosuroides (Swartz).

These are small ferns, with paleate rhizomes, narrow, pinnatifid or pinnate fronds, with a single simple or forked vein in each segment, and one exindusiate sorus on each fertile segment. It may be added that the pedicel is a single row of cells, that the annulus is of about 14 indurated cells, and that the spores are tetrahedral. The essential generic character was the restriction of the sori to a more or less entire apical portion of the frond.

There are six known species which conform to this strict original definition—four in America of which one ranges across Africa, one in Hawaii, and one in New Guinea. The distribution is flagrantly discontinuous, but it is still probable that they form a natural group.

The enlargement of the genus, to include species otherwise much like X. serrulata, the type, but without the differentiation of the fertile apical portion of the frond, is an idea as old as the genus. In an appendix to the Enumeratio, p. 275, Kaulfuss himself included a species, X. setosa, without such differentiation. Almost immedi-

[[]Volume 42, No. 1, of the JOURNAL, pp. 1-40 was issued April 15, 1952.]